Bookham acquiring Marconi Optical Components

Bookham Technology plc (Abingdon, UK) - which has about 640 staff - is acquiring Marconi plc subsidiary **Marconi Optical Components Ltd** (Caswell, UK) for 12.9m ordinary shares (about 10% of Bookham's share capital; i.e. about £19.7m). Bookham's cash balance at end-September 2001 was £199.7m. Marconi will purchase at least £30m of components from Bookham for its core business operations over the next 18 months.

MOC designs, makes and supplies active optical components, including fixed and tunable lasers, GaAs modulators, transmitters, receivers and EDFAs. For the year to end-March 2001, MOC (aggregated with the results of Marconi plc's optical amplifiers business, which it acquired on 1 April 2001) lost £18.7m (before tax) on sales of £11.1m. The value of the fixed assets and inventory was then £38.7m.

Using its "ASOC" silicon-based technology and high-volume production methods Bookham designs, makes and markets components which integrate multi-function optical processing functions onto a single silicon optical chip.

However, optical network systems manufacturers are increasingly demanding complete modular solutions rather than discrete components, so suppliers need to deliver more compact solutions offering higher performance, lower costs and greater functionality in an integrated package of active and passive subsystems.

By integrating MOC's active components, Bookham aims to accelerate its development of more highly integrated optical components and subsystems combining both active and passive optical functions.

"*Combining Bookham's integrated silicon optical chip with MOC's active optical components, we believe, will allow us to provide these fuller solutions,*" said Bookham president and CEO Giorgio Anania.

TERAHERTZ consolidates

TERAHERTZ Photonics (Livingston, Scotland, UK) was spun out of Heriot-Watt University in 1998 and in 2000 raised £3m in VC funding from Scottish Equity Partners and ADD Partners. However, in late November, following difficulties over the previous six months in raising £10m of 2nd-round venture capital, it said it was closing its optical device division, selling its specialist coatings division (mothballed only six month after it was opened) and cutting 13 of its 36 staff (mostly engineers). It said it would fulfil existing orders but take on no new customers.

TERAHERTZ is focusing on developing its remaining planar lightwave circuit materials division, while seeking a smaller amount in a bid to survive.

Over the past six months, the technology sector has experienced significant turbulence resulting in a dramatic fall in the stock prices of telecom and optical component companies on the world's stock markets. The venture capital community has re-assessed its investment criteria for this sector.

CST gains US$5m 2nd-round venture capital funding

III-V opto foundry and technology transfer incubator company **Compound Semiconductor Technologies Ltd** (Glasgow, UK) has secured US$5m in 2nd-round funding through a consortium led by Swedish venture capital firm European Digital Partners (backed by US private equity firm Kohlberg Kravis Roberts) and including Intel Capital. (Intel already has a small R&D facility in Glasgow.)

Compound Semiconductor Technologies was formed in 1998 as a joint project between Scottish Enterprise, Scottish Enterprise Glasgow, the University of Glasgow and the University of Strathclyde (and part-financed by the European Union, European Regional Development fund, Western Scotland Objective 2 Programme, Programme 1997-1999 Programme) to "*develop technologies and services, to provide facilities for and to commercialise University research and create and/or support new companies in compound semiconductors*". CST mainly operates out of its research centre, cleanrooms and manufacturing facility, located in the West of Scotland Science Park, Glasgow.

CST has provided incubation facilities for opto start-ups Intense Photonics (a spin-out from the University of Glasgow - see opposite page) and Kamelian (which has links to the University of Strathclyde - see Issue 9, page 35 and Issue 6, page 18). It also provides opto foundry for established companies, offering both MBE and MOCVD growth, wafer processing and device fabrication (focusing on GaAs and InP). CST also has access to GaN growth facilities.

Chief Executive Neil Martin says the funding "*gives CST the ability to help expand its foundry capabilities and service an increasing volume of start-ups whilst building on its position across a global customer base, where today approximately 60% of our revenue is generated overseas.*"

However, according to the November 27 issue of Scottish newspaper *The Herald*, Glasgow University academics opposed the deal on grounds that it would shift the focus of research away from Scottish start-ups. The two universities have spun off several opto firms, including Scotland's largest opto firm Kymata, which was bought by Alcatel last October for £82m, cutting 90 jobs (25% of its staff). According to the Scottish Optoelectronics Association, more than 800 jobs have been created by opto start-ups since 1998.

However, "*Intel is a minority stakeholder and their influence will be modest,*" the source said. "*If CST is to continue its world-class research and if successful spin-offs are to continue being produced, then it needs an injection of capital.*" Scottish Enterprise and the universities are expected to retain a 30% stake.